

10. A brake system for a vehicle comprising:

a brake pedal located in the vehicle and operative to reduce vehicle speed, said brake pedal coupled to a brake position sensor, said brake position sensor being operative to generate a brake position signal;

a brake pedal actuator located in the vehicle and coupled to said brake pedal, said brake pedal actuator operative to generate a variable brake feel force to said brake pedal;

a forward detection apparatus located in the vehicle and operative to detect vehicle distance and relative vehicle speed and generate a vehicle distance signal and a relative vehicle speed signal; and

a controller located in the vehicle and coupled to said brake pedal actuator, said controller operative to receive said brake position signal, said vehicle distance signal, and said vehicle speed signal, said controller including control logic operative to modify said variable brake feel force in proportion to said brake position signal, said vehicle distance signal and said vehicle speed signal, wherein said variable brake feel force induces a driver to apply an increased brake pedal force.

17. A method for providing enhanced braking for a vehicle comprising the steps of:

monitoring a position of a brake pedal;

determining distance and relative speed to a second vehicle; and

modifying a variable brake feel force of the brake pedal in proportion to said position of the brake pedal, said distance, and relative speed to said second vehicle, wherein said variable brake feel force induces a driver to apply an increased brake pedal force.

### **REMARKS**

This paper is submitted in response to the Office Action mailed May 12, 2003. Claims 1-20 are presently pending in this application. Claims 1, 4, 5, 7, 8, 10, 11, 14, 15 and 17 stand rejected. Claims 3, 6, 9, 12, 13, 16 and 18-20 are objected to.